

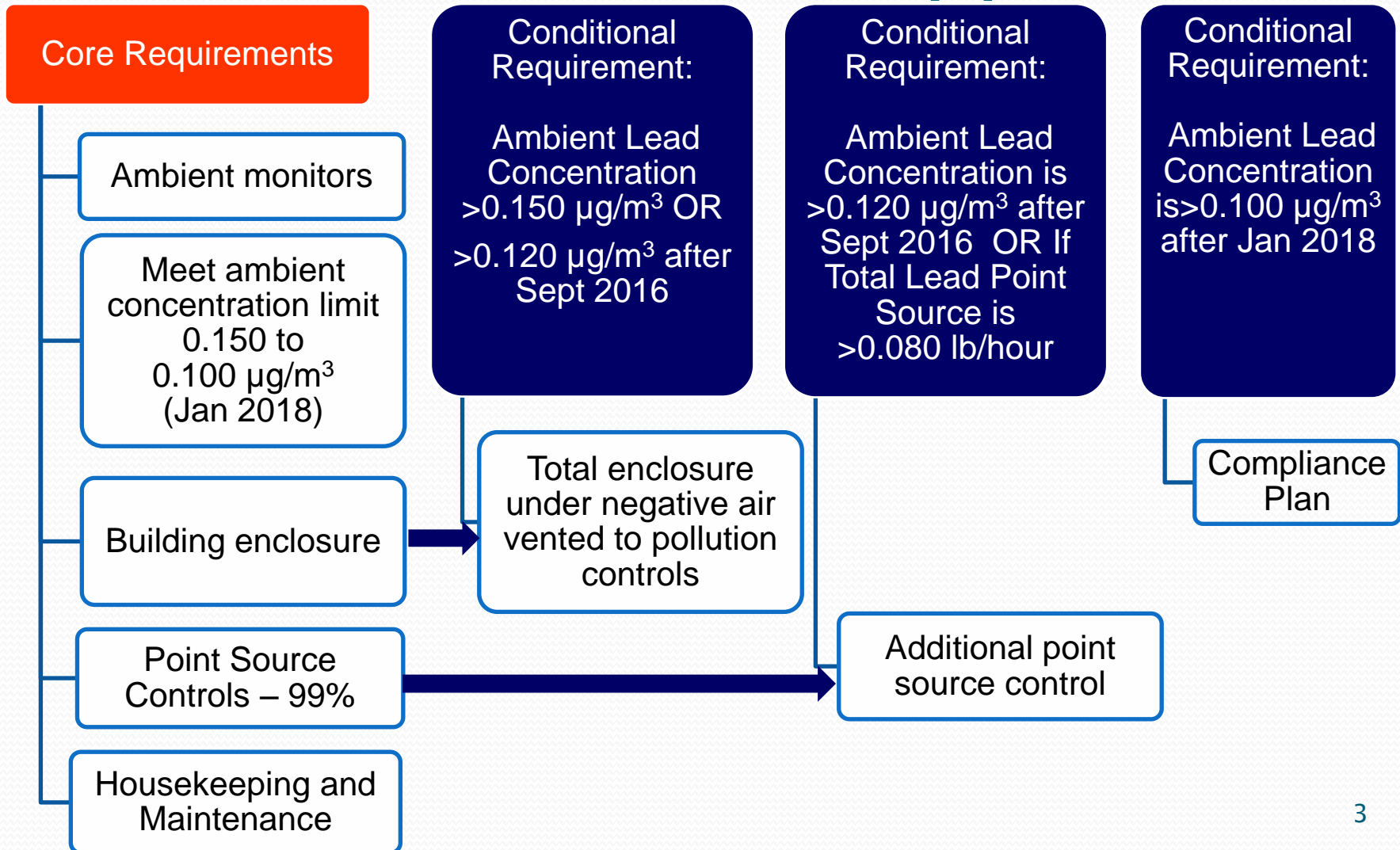
# **Proposed Rule 1420.2 Emission Standards for Lead from Metal Melting Facilities**

**Working Group Meeting #5  
May 13, 2015**

# 4<sup>th</sup> Working Group Meeting (4/23/15) – Recap

- Discussed draft proposed rule language released 4/17/15
- Rule modification requests:
  - Members of the working group suggested that instead of layering requirements for total enclosures with negative air, additional point source control, and then a compliance plan, that an approach that collapses these additional requirements into a compliance plan is preferred
  - Base the start of the ambient monitoring after the approval of the monitoring plan versus a specific start date
  - Allow for 24-hour samples to be collected over 24-hour time periods other than midnight to midnight
  - 99% control efficiency
    - May be difficult to achieve for low emission sources (low loading)
    - Source testing cost is doubled (inlet/outlet)
  - Decrease areas for plant speed limit

# Previous PR 1420.2 Approach



# Revised PR 1420.2 Approach

## Core Requirements

Ambient monitors

Meet ambient  
concentration limit  
0.150 to  
0.100  $\mu\text{g}/\text{m}^3$   
(Jan 2018)

Building enclosure

Point Source Controls  
– 99%

Housekeeping and  
Maintenance

## Compliance Plan Triggers

Effective Date	Ambient Air Concentration of Lead ( $\mu\text{g}/\text{m}^3$ ), averaged over 30 days	Total Facility Mass Lead Emissions Rate (lbs/hr)
Beginning January 1, 2017	0.120	0.080
On and after January 1, 2018	0.100	

# Compliance Plan Triggers for Submittal and Implementation

- Revised requirements for submitting and implementing compliance plans (Paragraphs (m)(1) and (m)(10))
- Triggers for submitting a Compliance Plan
  - Beginning January 1, 2017:
    - If ambient concentration of lead is  $> 0.120 \mu\text{g}/\text{m}^3$  or
    - If total facility mass emission rate is  $> 0.080 \text{ lbs/year}$  of lead
  - Beginning January 1, 2018:
    - If ambient concentration of lead is  $> 0.100 \mu\text{g}/\text{m}^3$  or
    - If total facility mass emission rate is  $> 0.080 \text{ lbs/year}$  of lead
- Triggers to implementing a Compliance Plan
  - Beginning January 1, 2017:
    - If ambient concentration of lead is  $> 0.150 \mu\text{g}/\text{m}^3$
  - Beginning January 1, 2018:
    - If ambient concentration of lead is  $> 0.100 \mu\text{g}/\text{m}^3$

# Compliance Plan – Lead Emission Reduction Measures

- Revised requirements to identify lead emission reduction measures for the Compliance Plan (Paragraph (m)(3))
  - Requirements for a total enclosure with negative air are the same as previous requirements for total enclosures with negative air (Referenced in Appendix I)
  - Provision for implementation of measures in the Compliance Plan moved to paragraph (m)(5) which discusses implementation schedule for lead emission reduction measures
  - No additional changes to other elements for the Compliance Plan

# Implementation Schedule for Lead Measures in Compliance Plan

- Operator specifies implementation schedule for each of the Lead Emission Reduction Measures in (m)(5)
  - Prioritizes lead measures in order from highest to lowest potential lead emission reductions
  - Specifies within the schedule:
    - Measures to implement after the initial exceedance
    - Measures to implement after subsequent exceedance(s)
  - EO may require implementation of measures prior to completion of initial measures if there is information to support that implementation of initial measures will not ensure a subsequent exceedance of  $0.100 \mu\text{g}/\text{m}^3$



# Implementation of Lead Measures in Compliance Plan

- If ambient concentrations are exceeded, operator shall implement measures based on schedule in approved Compliance Plan (Paragraph (m)(10))
- If the facility-wide point source emission rate is  $>0.080$  lb/hour then must implement those measures in approved Compliance Plan that will reduce the lead point source emission rate first (Paragraph (m)(11))
- Rule language added in paragraph (m)(11) to not require implementation of additional controls on existing control equipment if:
  - Facility is in the process of installing new/modified controls when ambient limits of paragraph (m)(10) are exceeded,
  - Subject lead point source is the cause of the exceedance, and
  - No more than 90 days have passed since initial operation of the new/modified lead control device



# Compliance Plan Updates

- Compliance Plan must be updated 30 days from any additional exceedances of the ambient air lead limit of  $0.100 \mu\text{g}/\text{m}^3$  (Paragraph (m)(7))
  - Update must identify any new lead emissions reduction measures that can be implemented
- Updates to the Compliance Plan are required: (Paragraph (m)(10):
  - 12 months from initial approval; and
  - On or before the annual anniversary of the initial approval if there is an exceedance of the ambient air lead limit of  $0.100 \mu\text{g}/\text{m}^3$  over the preceding 12 months
- Compliance Plan updates under Paragraph (m)(10) includes list of implemented measures, and any new measures or enhancements to existing lead emission reduction measures

# Schedule for Ambient Monitoring and Sampling

- Revised schedule to require commencement of monitoring based on “approval” of Lead Air Monitoring and Sampling Plan
- Submit a Lead Air Monitoring and Sampling Plan on or before January 1, 2016
- Install and conduct ambient air monitoring and sampling no later than 60 days after approval of the Lead Air Monitoring and Sampling Plan
- Ambient air lead concentration limit of  $0.150 \mu\text{g}/\text{m}^3$  averaged over 30 consecutive days effective 90 days from approval of the Lead Air Monitoring and Sampling Plan

# Lead Monitoring and Sampling Plan (Paragraph (e)(1))

- On or before January 1, 2016, submit a Lead Ambient Air Monitoring and Sampling Plan to the Executive Officer that includes:
  - Source test results for lead point sources pursuant to subdivision (j)
  - Number and locations for sampling sites
  - Map of facility identifying locations of:
    - All lead emission sources
    - Air pollution controls and stack information
    - Enclosures and openings within the enclosure
    - Storage areas for lead containing materials
    - Roadways where vehicles carrying lead containing materials traverse
    - Vehicle ingress and egress locations
    - Facility property line and fence line
    - Publicly accessible areas of the facility

# Ambient Air Sampling

- Revised requirement for 24-hour samples to allow operator to conduct 24-hour sampling on a schedule different than midnight-to-midnight upon approval by the Executive Officer
- Clarification that properly trained personnel, approved by the Executive Officer, may conduct ambient air monitoring and sampling
- Adding new rule language to allow facilities that are required to do daily sampling to go to 1-in-3 day sampling if the facility demonstrates a 1-year period where all 30 consecutive averages are  $< 0.100 \mu\text{g}/\text{m}^3$

# Point Source Emission Controls

- Lead point sources shall be vented to emission control device:
  - Reduces lead emission by a minimum of 99%
  - In lieu of minimum of 99%, can demonstrate that the total facility mass emission rate  $< 0.080$  lb/hour
- Staff proposing additional revision to require that minimum of 99% must be demonstrated for first year
  - 0.080 lb/hour lead emission rate can only be used in lieu of minimum of 99% in subsequent source tests and thereafter
  - 0.080 lb/hour may not represent a 99% control efficiency
  - Ensures no backsliding with Rule 1420

# Housekeeping Provisions

- Added definition for “Dust Suppressants”
- Revised distance for signs that post the speed limit:
  - Speed limit of 5 mph or less on any roadway located within 75 feet of the perimeter of a total enclosure
  - Speed limit of 15 mph or less on any roadway located more than 75 feet from the perimeter of a total enclosure
- No other changes to housekeeping provisions

# Other Rule Modifications

- Removed “New Facilities” subdivision that established distance requirements to sensitive receptors for new metal melting facilities constructed after rule adoption
- Added Rule 1420 exemption
  - Staff will be modifying this exemption to subsume any existing requirements under Rule 1420 (i.e., compliance plans) into PR 1420.2
  - Intent of exemption is still for facilities to comply with one lead rule
- Adding clarifications to exemption areas for Total Enclosures



# Schedule

- Public Workshop – May 14, 2015
- Set Hearing – June 5, 2015
- Board Hearing – July 10, 2015

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